

IN THE CLAIMS

The pending unamended claims are reproduced below.



 (ORIGINAL) A method of loading data into a data store connected to a computer, the method comprising the steps of:

identifying memory constraints;

identifying processing capabilities; and

determining a number of load and sort processes to be started in parallel based on the identified memory constraints and processing capabilities.

- 2. (ORIGINAL) The method of claim 1, further comprising determining a number of build processes based on the number of sort processes.
- 3. (ORIGINAL) The method of claim 1, wherein the number of sort processes does not exceed a number of indexes to be built.
- 4. (ORIGINAL) The method of claim 1, wherein the number of load processes does not exceed a number of partitions to be loaded.
- 5. (ORIGINAL) The method of claim 1, wherein the total number of load and sort processes does not exceed processing capabilities.
- (ORIGINAL) The method of claim 1, wherein the memory utilized by the load and sort processes does not exceed memory constraints.
- 7. (PREVIOUSLY AMENDED) The method of claim 1, wherein the number of load processes and the number of sort processes each require different processing power.
- 8. (PREVIOUSLY AMENDED) The method of claim 1, wherein the number of load processes and the number of sort processes each require similar processing power.
- 9. (PREVIOUSLY AMENDED) The method of claim 1, wherein the number of load processes is not equal to the number of sort processes.



- 10. (PREVIOUSLY AMENDED) The method of claim 1, wherein the number of load processes is equal to the number of sort processes.
- 11. (ORIGINAL) The method of claim 1, wherein the number of load processes is equal to the number of sort processes and which is equal to half of the processing capabilities.
- 12. (ORIGINAL) The method of claim 1, wherein a number of indexes is less than half of the processing capabilities, wherein a number of sort processes is equal to the number of indexes, and further comprising determining that a number of load processes is the smaller of the difference of the processing capabilities available for the load processes and the number of sort processes, and a number of partitions.
- 13. (ORIGINAL) The method of claim 1, wherein a number of partitions is less than half of the processing capabilities, wherein a number of load processes is equal to the number of partitions, and further comprising determining that a number of sort processes is the smaller of the difference of the processing capabilities available for the sort processes and the number of load processes, and a number of indexes.
- 14. (ORIGINAL) The method of claim 1, wherein a number of indexes is less than the difference of the total amount of available memory and the amount of memory required for a main process, divided by the amount of memory required for each load and sort process, wherein a number of sort processes is equal to the number of indexes, and further comprising determining that the number of load processes is the smaller of the difference of a total amount of available memory and the amount of memory required for the main process, and the amount of memory for each sort process multiplied by the number of indexes, divided by the memory required for each load process, and a number of partitions.
- 15. (ORIGINAL) The method of claim 1, wherein the number of partitions is less than the difference of the total amount of available memory and the amount of memory required for a main process, divided by the amount of memory required for each load an sort process, wherein a number of load processes is equal to the number of partitions, and further comprising determining that the number of sort processes is the smaller of the difference of the total amount of available memory, the





amount of memory required for the main process, and the amount of memory for each load process multiplied by the number of partitions, divided by the memory required for each sort process, and a number of indexes.

16. (ORIGINAL) The method of claim 1, wherein a number of load processes is equal to a number of sort processes which is equal to the difference of the total amount of available memory available and the amount of memory required for a main process, divided by the amount of memory required for each load and sort process.

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- 17. (ORIGINAL) The method of claim 1, wherein the number of indexes is less than the difference of the total amount of available memory, the amount of memory required for a main process, and the amount of memory required for each load process multiplied by the processing capabilities, divided by the difference of the amount of memory required for each sort process and each load process, wherein a number of sort processes is equal to the number of indexes, and further comprising determining that the number of load processes is the smaller of the difference of the processing capabilities and the number of indexes, and a number of partitions.
- 18. (ORIGINAL) The method of claim 1, wherein the number of partitions is less than the difference of the sum of the amount of memory required for each sort process multiplied by the processing capabilities, the total amount of memory required for a main process, and the amount of memory required for each load process, divided by the difference of the amount of memory required for reach sort process and each load process, wherein a number of load processes is equal to the number of partitions, and further comprising determining that the number of sort processes is the smaller of the difference of the total amount of available memory, the amount of memory required for the main process, and the amount of memory for each load process multiplied by the number of partitions, divided by the memory required for each sort process, and a number of indexes.
- 19. (ORIGINAL) The method of claim 1, wherein a number of sort processes is equal to difference of the total amount of available memory, the amount of memory required for a main process, and the amount of memory required for each load process, divided by the difference of the amount of memory required for each sort process and each load process, and wherein the number of load processes is equal to the difference of the processing capabilities and the number of sort processes.



- 20. (ORIGINAL) An apparatus for executing parallel load operations, comprising:
  a computer having a data store coupled thereto, wherein the data store stores data; and
  one or more computer programs, performed by the computer, for identifying memory constrains,
  identifying processing capabilities, and determining a number of load and sort processes to be started in
  parallel based on the identified memory constraints and processing capabilities.
- 21. (PREVIOUSLY AMENDED) The apparatus of claim 20, further comprising determining a number of build processes based on the number of sort processes.
- 22. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein the number of sort processes does not exceed a number of indexes to be built.
- 23. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein the number of load processes does not exceed a number of partitions to be loaded.
- 24. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein the total number of load and sort processes does not exceed processing capabilities.
- 25. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein the memory utilized by the load and sort processes does not exceed memory constraints.
- 26. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein the number of load processes and the number of sort processes each require different processing power.
- 27. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein the number of load processes and the number of sort processes each require similar processing power.
- 28. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein the number of load processes is not equal to the number of sort processes.

-7-



- 29. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein the number of load processes is equal to the number of sort processes.
- 30. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein the number of load processes is equal to the number of sort processes which is equal to half of the processing capabilities.
- 31. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein a number of indexes is less than half of the processing capabilities, wherein a number of sort processes is equal to the number of indexes, and further comprising determining that a number of load processes is the smaller of the difference of the processing capabilities available for the load processes and the number of sort processes, and a number of partitions.
- 32. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein a number of partitions is less than half of the processing capabilities, wherein a number of load processes is equal to the number of partitions, and further comprising determining that a number of sort processes is the smaller of the difference of the processing capabilities available for the sort processes and the number of load processes, and a number of indexes.
- 33. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein a number of indexes is less than the difference of the total amount of available memory and the amount of memory required for a main process, divided by the amount of memory required for each load and sort process, wherein a number of sort processes is equal to the number of indexes, and further comprising determining that the number of load processes is the smaller of the difference of a total amount of available memory and the amount of memory required for the main process, and the amount of memory for each sort process multiplied by the number of indexes, divided by the memory required for each load process, and on a number of partitions.
- 34. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein the number of partitions is less than the difference of the total amount of available memory and the amount of memory required for a main process, divided by the amount of memory required for each load and sort process is equal to the number of partitions, and further comprising determining that the number of sort processes is the smaller of the difference of the total amount of available memory, the amount of



memory required for the main process, and the amount of memory for each load process multiplied by the number of partitions, divided by the memory required for each sort process, and a number of indexes.

35. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein a number of load processes is equal to a number of sort processes which is equal to the difference of the total amount of available memory available and the amount of memory required for a main process, divided by the amount of memory required for each load and sort process.

162

- 36. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein the number of indexes is less than the difference of the total amount of available memory, the amount of memory required for a main process, and the amount of memory required for each load process multiplied by the processing capabilities, divided by the difference of the amount of memory required for each sort process and each load process, wherein a number of sort processes is equal to the number of indexes, and further comprising determining that the number of load processes is the smaller of the difference of the processing capabilities and the number of indexes and, a number of partitions.
- 37. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein the number of partitions is less than the difference of the sum of the amount of memory required for each sort process multiplied by the processing capabilities, the total amount of memory required for a main process, and the amount of memory required for each load process, divided by the difference of the amount of memory required for each sort process and each load process, wherein a number of load processes is equal to the number of partitions, and further comprising determining that the number of sort processes is the smaller of the difference of the total amount of available memory, the amount of memory required for the main process, and the amount of memory for each load process multiplied by the number of partitions, divided by the memory required for each sort process, and a number of indexes.
- 38. (PREVIOUSLY AMENDED) The apparatus of claim 20, wherein a number of sort processes is equal to difference of the total amount of available memory, the amount of memory required for a main process, and the amount of memory required for each load process, divided by the difference of the amount of memory required for each sort process and each load process, and wherein

the number of load processes is equal to the difference to the processing capabilities and the number of sort processes.

39. (ORIGINAL) An article of manufacture comprising a program storage medium readable by a computer and embodying one or more instructions executable by the computer to perform method steps for loading data into a data store connected to a computer, the method comprising the steps of:

identifying memory constraints;

identifying processing capabilities; and

determining a number of load and sort processes to be started in parallel based on the identified memory constraints and processing capabilities.

- 40. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, further comprising determining a number of build processes based on the number of sort processes.
- 41. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein the number of sort processes does not exceed a number of indexes to be built.
- 42. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein the number of load processes does not exceed a number of partitions to be loaded.
- 43. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein the total number of load and sort processes does not exceed processing capabilities.
- 44. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein the memory utilized by the load and sort processes does not exceed memory constraints.
- 45. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein the number of load processes and the number of sort processes each require different processing power.
- 46. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein the number of load processes and the number of sort processes each require similar processing power.





- 47. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein the number of load processes is not equal to the number of sort processes.
- 48. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein the number of load processes is equal to the number of sort processes.
- 49. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein the number of load processes is equal to the number of sort processes which is equal to half of the processing capabilities.
- 50. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein a number of indexes is less than half of the processing capabilities, wherein a number of sort processes is equal to the number of sort processes is equal to the number of indexes, and further comprising, determining that a number of load processes is the smaller of the difference of the processing capabilities available for the load processes and the number of sort processes, and a number of partitions.
- 51. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein a number of partitions if less than half of the processing capabilities, wherein a number of load processes is equal to the number of partitions, and further comprising determining that a number of sort processes is the smaller of the difference of the processing capabilities available for the sort processes and the number of load processes, and on a number of indexes.
- 52. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein a number of indexes is less than the difference of the total amount of available memory and the amount of memory required for a main process, divided by the amount of memory required for each load and sort process, wherein a number of sort processes is equal to the number of indexes, and further comprising determining that the number of load processes is the smaller of the difference of a total amount of available memory and the amount of memory required for the main process, and the amount of memory for each sort process multiplied by the number of indexes, divided by the memory required for each load process and, a number of partitions.



53. (PREVIOUSLY AMENDED) The article of manufacture claim 39, wherein the number of partitions is less than the difference of the total amount of available memory and the amount of memory required for a main process, divided by the amount of memory required for each load and sort process, wherein a number of load processes is equal to the number of partitions, and further comprising determining that the number of sort processes is the smaller of the difference of the total amount of available memory, the amount of memory required for the main process, and the amount of memory for each load process multiplied by the number of partitions, divided by the memory required for each sort process, and a number of indexes.

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- 54. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein a number of load processes is equal to a number of sort processes which is equal to the difference of the total amount of available memory available and the amount of memory required for a main process, divided by the amount of memory required for each load and sort process.
- 55. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein the number of indexes is less than the difference of the total amount of available memory, the amount of memory required for a main process, and the amount of memory required for each load process multiplied by the processing capabilities, divided by the difference of the amount of memory required for each sort process and each load process, wherein a number of sort processes is equal to the number of indexes, and further comprising determining that the number of load processes is the smaller of the difference of the processing capabilities and the number of indexes and, a number of partitions.
- 56. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein the number of partitions is less than the difference of the sum of the amount of memory required for each sort process multiplied by the processing capabilities, the total amount of memory required for a main process, and the amount of memory required for each load process, divided by the difference of the amount of memory required for each sort process and each load process, wherein a number of load processes is equal to the number of partitions, and further comprising determining that the number of sort processes is the smaller of the difference of the total amount of available memory, the amount of memory required for the main process, and the amount of memory for each load process multiplied by the number of partitions, divided by the memory required for each sort process, and a number of indexes.



57. (PREVIOUSLY AMENDED) The article of manufacture of claim 39, wherein a number of sort processes is equal to difference of the total amount of available memory, the amount of memory required for a main process, and the amount of memory required for each load process, divided by the difference of the amount of memory required for each sort process and each load process, and wherein the number of load processes is equal to the difference of the processing capabilities and the number of sort processes.